U.S. DEPARTMENT OF AGRICULTURE GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION FEDERAL GRAIN INSPECTION SERVICE STOP 3630 WASHINGTON, D.C. 20090-3630

NMR HANDBOOK CHAPTER 4 5-12-03

CHAPTER 4

CERTIFICATION

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4.1 SEED TYPE DECLARATION

Applicants requesting sunflower seed oil determination must declare the seed type as part of the request for service. Written confirmation or a verbal declaration may be required at the discretion of official personnel.

Applicants may make blanket declarations for all lots or a specific type of service. For example, All inbound lots of sunflower seed are of high-linoleic-type unless specified otherwise.@

The official certificate shall include a qualifying statement reflecting applicant declaration (see section 4.3 c).

4.2 EXPORT LOTS

Applicants for service may request official sunflower seed oil determination on the basis of sublot samples or a composite sample. The type of service and the quantity of sunflower seed to be loaded must be indicated on the load order document.

a. Sublot Basis.

- (1) Obtain a representative sample for each sublot.
- (2) Follow the official procedure to determine NMR oil content for each sublot sample. Record the oil percentage on the inspection log to the nearest tenth percent.
- (3) Using the standard FGIS rounding procedures, calculate the average NMR oil content for all sublots.
- (4) Determine the highest and lowest NMR oil percent for all sublots.
- (5) Report the high, low, and the average percent NMR oil (10% mb) to the nearest tenth percent on the certificate.

b. Ship Composite Basis.

- (1) Based on the number of sublots being loaded, determine the amount of sample portion (in proportionate size) to be taken from each sublot that will provide a 1,000-gram composite sample.
- (2) At the completion of ship loading, obtain a representative sample of at least 100 grams from the composite using a Boerner divider.
- (3) Determine the NMR oil content using the official procedures.

(4) Report the percent NMR oil (10% mb), as determined on the composite sample, to the nearest tenth percent on the certificate.

4.3 CERTIFICATION

Record the percent oil of the sunflower seed using the appropriate approved statement in the "Remarks" section of the official grade certificate. Results may be reported on the same certificate with official grade or factor results or reported on a separate certificate. When certifying oil alone (without official grade and factors), cross out the words "Grade and" and show only "sunflower seed" on the grade line of the certificate.

a.	Appro	pproved Statements for Export Lots.	
	(1)	Sublot Basis	
		"Oil content of sublots range from (lowest) % to (highest) %."	
		"Average oil content for all sublots %, 10 percent moisture basis."	
	(2)	Composite Basis	
		"Oil content %, 10 percent moisture basis. Determination based on a composite sample."	
b.	Appro	ved Statement for Domestic Lots.	
		"Oil content %, 10 percent moisture basis."	
c.	Approved Qualifying Statements.		
	Include	plicant for service must declare the type of seed for NMR oil testing. e one of the following statements on the certificate. Insert the appropriate wer seed (linoleic, mid-oleic, high-oleic) to complete the statement.	
	Note:	The term NuSun may be used in lieu of mid-oleic.	
	"() type sunflower seed, per applicant statement."	
	"Appli	cant states sunflower seed is () type."	
		office managers can approve minor modifications to the statements provided aning and intent of the statements have not changed.	